

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023718**Date Inspected:** 18-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

NDT:

Cross Beam 18 (Tagging)

This QA Inspector performed Magnetic Particle Testing (MPT) Verification Inspection of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report on this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations verified were as follows:

CB3002K-001-213~242, 39~42,185~206, 317, 318, 35, 36

CB3002K-002-213~242, 39~42,185~206, 317, 318, 35, 36

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## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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CB3002L-18-25, 23,194,27,21,192,19,190

Nondestructive testing (NDT) notification No.09145

### WELDING:

#### Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 044541 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013A-001 ; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding.. ZPMC Quality Control (QC) Mr. Zhang Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-B-U2-FCM-1.

#### Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 068445 perform Shielded Metal Arc Welding (SMAW), Base Metal Repair after removed Temporary attachment ; located On Orthotropic Box Girder (OBG) Bottom Plate to Bottom Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shi Lei. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (CWRR) was B-CWR2861. ZPMC Quality Control (QC) Mr. She Lei was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F) FCM-Repair-1.

#### Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 040610 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013A-009 ; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding.. ZPMC Quality Control (QC) Mr. Zhang Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-B-U2-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.

### Summary of Conversations:

No significant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey - 15000026784, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Prabhune,Manoj	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

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